

# Notice of Allowability

Application No.

10/034,181

Examiner

Kandasamy Thangavelu

Applicant(s)

WYNN, OWEN JOHN WILLIAMS

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## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to June 19, 2006.
2. ☒ The allowed claim(s) is/are 1-8.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## **DETAILED ACTION**

### ***Introduction***

1. This communication is in response to the Applicants' communication dated June 19, 2006. Claims 1-8 of the application are pending.

### ***Reasons for Allowance***

2. Claims 1-8 of the application are allowed over prior art of record.
3. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

The closest prior art of record shows:

(1) a vehicle simulator having a head-up display and projection system for projecting a generated scene and symbology onto a common screen; tracking apparatus is provided for providing position and angular orientation signals representative of the eye of a person viewing the projected scene and symbology; an image generation system generates the scene and symbology for the projection system as a function of position and angular orientation signals provided by the tracking apparatus; the symbology is representative of the symbology produced by a head-up display; the head-up display allows the pilot to view the outside environment in

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front of the aircraft together with the information typically displayed on the instrument panel of the aircraft (**Turner et al.**, U.S. Patent 6,437,759);

(2) a training device for presenting to a student driver seated in a stationary body provided with motor vehicle controls and a visual picture of the terrain through which he is supposed to be moving and which behaves appropriately in response to his handling of the controls; the visual illustration apparatus can be operated from a real vehicle, for example the motor car owned by the trainee; the vehicle is provided with an instructor's control unit so the instructor can select the gear ratios in a simulated gear box based on the student's use of gear lever and clutch; the visual illusion is produced on a translucent screen in front of the car by an apparatus behind the screen; a motor unit simulates the engine, clutch, gearbox and brakes of the car under the control of the movements made by the student driver and the operation by an instructor seated beside the student driver (**Larlham et al.**, Patent Specification 984,816 UK Patent Office, March 1961, submitted as part of the IDS); and

(3) autostereoscopic displays employing a head mounted projector and retro-reflective screen; the system eliminates the need for beam splitters by using a modified cube-corner retro-reflective material; because the modification of the retro-reflective behavior is accomplished by reflection, the modified screen functions properly with multicolor and full color images  
**Covannon et al.**, (U.S. Patent 6,543,899)

Additional state of the art reviewed and considered by the Examiner is found in U.S. Patent Application 2006/0154219; U.S. Patent Application 2006/0057544; U.S. Patent Application 2006/0040239; U.S. Patent Application 2005/0240319; U.S. Patent Application

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2005/0187677; U.S. Patent Application 2004/0167761; U.S. Patent Application 2004/0038185; U.S. Patent Application 2003/0014230; U.S. Patent Application 2002/0140633; U.S. Patent Application 2002/0052724.

None of these references taken either alone or in combination with the prior art of record discloses a vehicle simulator, specifically including:

(Claim 1) “(i) a real-world vehicle whose controls and instruments are dual-mode such that they can be switched between normal operation and simulated operation;

(ii) a retro-reflecting screen which is deployed around and outside windows of a control area of the vehicle, which control area is for a person operating the simulator;

(v) a simulator host computer that receives information from controls of the vehicle and sends information to the controls and to instruments of the vehicle when the vehicle is in a simulation mode”.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance.”

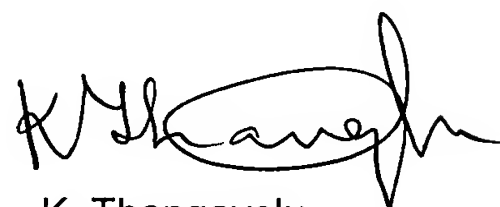
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kandasamy Thangavelu whose telephone number is

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571-272-3717. The examiner can normally be reached on Monday through Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez, can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC 2100 Group receptionist: 571-272-2100.

A handwritten signature in black ink, appearing to read 'K. Thangavelu', with a large, stylized loop at the end.

K. Thangavelu  
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July 20, 2006